



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Ans

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,710	02/06/2002	Anees Narsinh	45390/JEC/X2/134069	9204

35114 7590 03/30/2004

ALCATEL INTERNETWORKING SYSTEM, INC.
ALCATEL-INTELLECTUAL PROPERTY DEPARTMENT
3400 W. PLANO PARKWAY, MS LEGL2
PLANO, TX 75075

EXAMINER

MOLINARI, MICHAEL J

ART UNIT PAPER NUMBER

2665

DATE MAILED: 03/30/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,710

Applicant(s)

NARSINH ET AL.

Examiner

Michael J Molinari

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilkki (U.S. Patent No. 6,047,326) in view of Rom et al. (U.S. Patent No. 6,252,849).

3. Referring to claim 1, Kilkki discloses a data communication node comprising: an access controller adapted to: receive an inbound packet, classify the packet wherein a first set of classification information (the state of the buffers and the priority level of the cell and whether or not the cell meets criteria) is generated, and admit the packet classified by the access controller into the node based on the first set of classification information (see column 7, lines 28-42). Kilkki differs from claim 1 in that he fails to disclose a switching controller. However, the use of a switching controller for managing output from a network device is old and well known in the art. For example, Rom et al. disclose a switching controller (Switch, see Figure 2, #205) coupled to an access controller, wherein the switching controller is adapted to: receive the admitted inbound packet from the access controller, further classify the admitted packet wherein a second set of classification information (see column 4, lines 24-29) is generated, and forward the packet classified by the switching controller to a destination address based on the second set of classification information (see column 4, line 6 to column 5, line 36), which has the advantage

Art Unit: 2665

of forwarding the packet to its destination via the correct port. One skilled in the art would have recognized the advantage of the switching controller as taught by Rom et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of a switching controller as taught by Rom et al. into the invention of Kilkki to achieve the advantage of forwarding the packet to its destination via the correct port.

4. Referring to claim 2, Kilkki discloses that the access controller is a media access controller (See column 5, lines 11-24 and 43-44).

5. Referring to claim 3, Kilkki discloses that the first set of classification information includes a priority associated with the inbound packet (see column 5, lines 43-47).

6. Referring to claim 4, Kilkki discloses that the access controller gives precedence in admitting packets associated with a first priority over packets associated with a second priority (see column 5, lines 43-47 and column 6, lines 40-54).

7. Referring to claim 5, Kilkki discloses that the access controller includes a data buffer storing admitted inbound packets (see column 3, lines 50-62 and column 7, lines 28-42).

8. Referring to claim 6, Kilkki discloses that the congestion status data includes a buffer utilization level, the access controller admitting the inbound packet if the utilization level is lower than a predetermined threshold level (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

9. Referring to claim 7, Kilkki discloses that the congestion status data includes a buffer utilization level, the access controller discarding the inbound packet if the utilization level is higher than a predetermined threshold level (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

10. Referring to claim 8, Kilkki discloses that the access controller discards the inbound packet based on a discard probability that varies based on the first set of classification information (see column 15, line 48 to column 16, line 3 and column 18, line 57 to column 19, line 12).

11. Referring to claim 9, Kilkki disclose an access controller in a data communication node comprising: an input receiving an inbound packet; a classification engine coupled to the input classifying the inbound packet, wherein classification information is generated (see column 7, lines 28-42); a buffer storing admitted inbound packets (see column 7, lines 28-42); and a disposition engine coupled to the classification engine and the buffer, wherein the disposition engine is adapted to receive the classification information, determine whether the inbound packet is to be admitted based on a utilization level of the buffer determined from the classification information (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3). Kilkki differs from claim 9 in that he fails to disclose the disposition engine delivering the inbound packet to a switching controller if the packet is admitted. However, the use of a switching controller for managing output from a network device is old and well known in the art. For example, Rom et al. disclose delivering the inbound packet to a switching controller (Switch, see Figure 2, #205 and see column 4, line 6 to column 5, line 36), which has the advantage of forwarding the packet to its destination via the correct port. One skilled in the art would have recognized the advantage of the switching controller as taught by Rom et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of a switching controller as taught by Rom et al. into the

invention of Kilkki to achieve the advantage of forwarding the packet to its destination via the correct port.

12. Referring to claim 10, Kilkki discloses that the classification information includes a priority associated with the inbound packet (see column 5, lines 43-47).

13. Referring to claim 11, Kilkki discloses that the disposition engine gives precedence in admitting packets associated with a first priority over packets associated with a second priority (see column 5, lines 43-47 and column 6, lines 40-54).

14. Referring to claim 12, Kilkki discloses that the disposition engine admits the inbound packet if the utilization level of the buffer is lower than a predetermined threshold level (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

15. Referring to claim 13, Kilkki discloses that the disposition engine discards the inbound packet if the utilization level of the buffer is higher than a predetermined threshold level (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

16. Referring to claim 14, Kilkki discloses that the disposition engine discards the inbound packet based on a discard probability that varies based on the classification information (see column 15, line 48 to column 16, line 3 and column 18, line 57 to column 19, line 12).

17. Referring to claim 15, Kilkki discloses a method for packet traffic management in a data communication node including an access controller, the method comprising: at the access controller: receiving an inbound packet; classifying the inbound packet, wherein classification information is generated (see column 7, lines 28-42); determining congestion status data from the classification information (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3); and admitting the inbound packet based on the congestion status data

Art Unit: 2665

(see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

Kilkki differs from claim 15 in that he fails to disclose the use of a switching controller that determines whether the admitted packet is to be forwarded to a destination address. However, the use of a switching controller for managing output from a network device is old and well known in the art. For example, Rom et al. disclose delivering the inbound packet to a switching controller (Switch, see Figure 2, #205 and see column 4, line 6 to column 5, line 36), which has the advantage of forwarding the packet to its destination via the correct port. One skilled in the art would have recognized the advantage of the switching controller as taught by Rom et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of a switching controller as taught by Rom et al. into the invention of Kilkki to achieve the advantage of forwarding the packet to its destination via the correct port.

18. Referring to claim 16, Kilkki discloses that the access controller is a media access controller (see column 5, lines 11-24 and 43-44).

19. Referring to claim 17, Kilkki discloses that the classification information includes a priority associated with the inbound packet (see column 5, lines 43-47).

20. Referring to claim 18, Kilkki discloses that the admitting the inbound packet further comprises giving precedence to packets associated with a first priority over packets associated with a second priority (see column 5, lines 43-47 and column 6, lines 40-54).

21. Referring to claim 19, Kilkki discloses storing the inbound packet in a packet buffer associated with the access controller if the packet is admitted (see column 3, lines 50-62 and column 7, lines 28-42).

Art Unit: 2665

22. Referring to claim 20, Kilkki discloses that the determining of the congestion status data comprises determining a utilization level of the packet buffer (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

23. Referring to claim 21, Kilkki discloses that the admitting of the inbound packet comprises admitting the inbound packet if the utilization level of the packet buffer is lower than a predetermined threshold level (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

24. Referring to claim 22, Kilkki discloses discarding the inbound packet if the utilization level of the packet buffer is higher than a predetermined threshold level (see column 7, lines 28-42, column 8, lines 23-38, and column 15, line 48 to column 16, line 3).

25. Referring to claim 23, Kilkki discloses discarding the inbound packet based on a discard probability that varies based on the classification information (see column 15, line 48 to column 16, line 3 and column 18, line 57 to column 19, line 12).

Response to Arguments

26. Applicant's arguments filed 12 March 2004 have been fully considered but they are not persuasive.

27. Applicant has argued that Kilkki and Rom et al. cannot be combined because the cited functions are the same function. However, the function taught by Kilkki merely describes what takes place when packets initially enter the switch and, specifically, whether to admit them to the switch or not. Rom et al. detail how to route a packet that has already been admitted to the switch

Art Unit: 2665

via one of the input ports. Therefore, the teachings found in the two references are not mutually exclusive.

28. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Rom et al. provide a motivation for making the combination in column 1, lines 26-32.

Conclusion

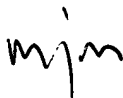
29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

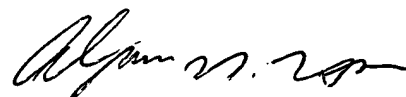
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Molinari whose telephone number is (703) 305-5742. The examiner can normally be reached on Monday-Thursday 8am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Joseph Molinari



ALPUS H. HSU
PRIMARY EXAMINER